

****ATTENTION****

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4/91

Columbian White-tailed Deer

Odocoileus virginianus leucurus

Range:

Originally found in the Cowlitz River drainage, and the lower Columbia River area to the upper Willamette Valley. Now confined to a small area near the mouth of the Columbia River and in the upper Umpqua River drainage near Roseburg, Oregon. The species is listed as state and federally endangered.

Washington Distribution:

Found only in Wakhiakum County on islands in, and along the banks of, the Columbia River.

Habitat Requirements:

Columbian white-tailed deer inhabit riparian forest, brushland, and pasture on islands and within the floodplain near the mouth of the Columbia River (Suring 1974, Gavin et al. 1984). They were originally associated with native tidal spruce forest communities along the Columbia and Cowlitz Rivers.

Feeding preferences of the Columbian white-tailed deer shift seasonally. Studies at the Columbian White-tailed Deer National Wildlife Refuge show herbs to be preferred foraging items spring through fall. Use of browse is most important in winter and fall (Dublin 1980).

Adequate cover is apparently very important to the deer. Suring and Vohs (1979) reported little use of those portions of pastures located more than 250m (750') from woodland edge. The deer apparently prefer plant communities that provide both forage and cover; park forest community is preferred. Other important plant communities include open canopy forest, sparse rush, and dense thistle (USDI 1983).

Limiting Factors:

Availability of sufficient woodland cover for feeding and resting. Loss of former habitat to human development and competition for undeveloped habitat by black-tailed deer (Clark, pers. comm.).

Management Recommendations:

Pastures in areas managed for Columbian white-tailed deer should not be greater than 500m (1,500') across, and optimally should be much narrower. Shrub and tree cover should be interspersed within pastures used by deer. In areas characterized by extensive pasture with little woody vegetation, fences should be constructed to exclude cattle and allow reestablishment of shrub and forest communities. Planting of trees (spruce, alder, willow) and shrubs such as salal and ninebark will help reestablishment of browse and cover in extensive pasturelands.

In areas where clearings for the deer are desirable, cattle grazing and haying can be used to maintain short-grass fields, which provide nutritious forage for Columbian white-tailed deer (Clark, pers. comm.). The deer avoid areas where cattle are present (Suring 1974, Gavin 1979). Therefore, grazing should be used on a seasonal basis during the plant growing season and cattle should be removed after clearing has been achieved.

Cattle should be fenced out of woodland communities managed for Columbian white-tailed deer because they trample important browse plants.

Maintaining tidal spruce forest communities intact will protect the native habitat of the Columbian white-tailed deer (Davison 1979). Riparian habitats should be protected from degradation caused by logging, grazing and brush removal.

References:

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Gavin, T.A., L.H. Suring, P.A. Vohs, Jr. and C.E. Meslow. 1984. Population characteristics, spatial organization and natural mortality in the Columbian white-tailed deer. Wildlife Monograph # 91.

Suring, L.H. 1974. Habitat use and activity patterns of the Columbian white-tailed deer. M.S. Thesis, Oregon State University, Corvallis.

Suring, L.H. and P.A. Vohs, Jr. 1979. Habitat use by Columbian white-tailed deer. J. Wildl. Manage. 43(3):610-619.

USDI Fish and Wildlife Service. 1983. Columbian white-tailed deer recovery plan. USDI FWS, Portland, OR.

Key Points:

Habitat Requirements:

- Inhabit riparian forest, brushland and pasture at the mouth of the Columbia River.
- Seldom forage more than 228m (750 ft.) from woodland edge.
- Prefer habitat types that provide both cover and forage.
- Graze herbs from spring through fall, browse woody plants during fall and

winter.

- Avoid areas where cattle are present.

Management Recommendations:

- Maintain tidal spruce forests and protect riparian areas.
- Exclude cattle from woodland habitats.
- Avoid large expanses of unbroken pasture; small, narrow pastures should be interspersed with tree and shrub cover.
- If pastures lack woody vegetation, allow trees and shrubs to reestablish: plant trees and shrubs, and exclude cattle.
- Use haying and seasonal grazing to maintain short-grass fields; remove cattle once favorable deer foraging conditions have been created.